

FIG. 1 (PRIOR ART)

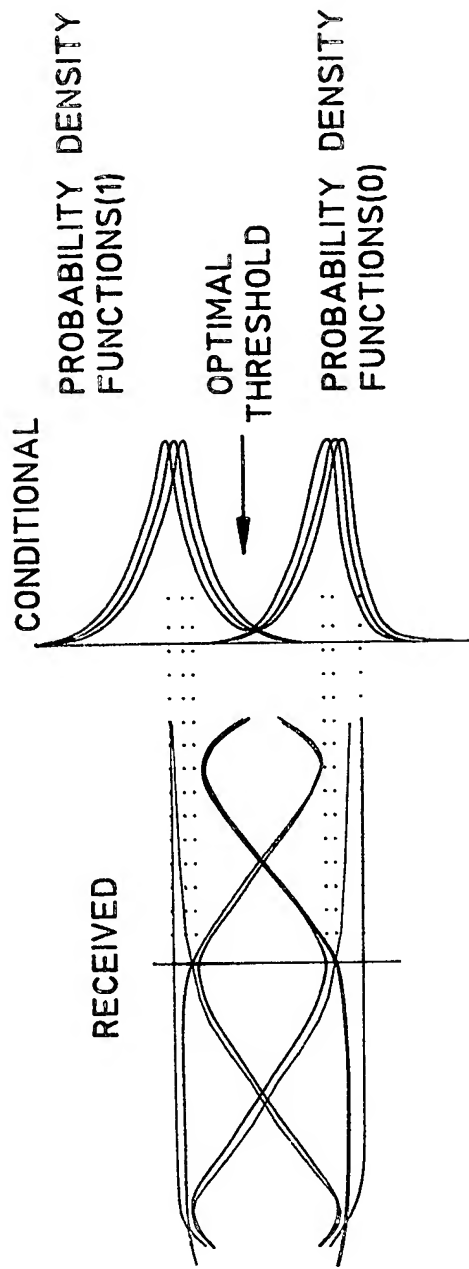


FIG. 2 (PRIOR ART)

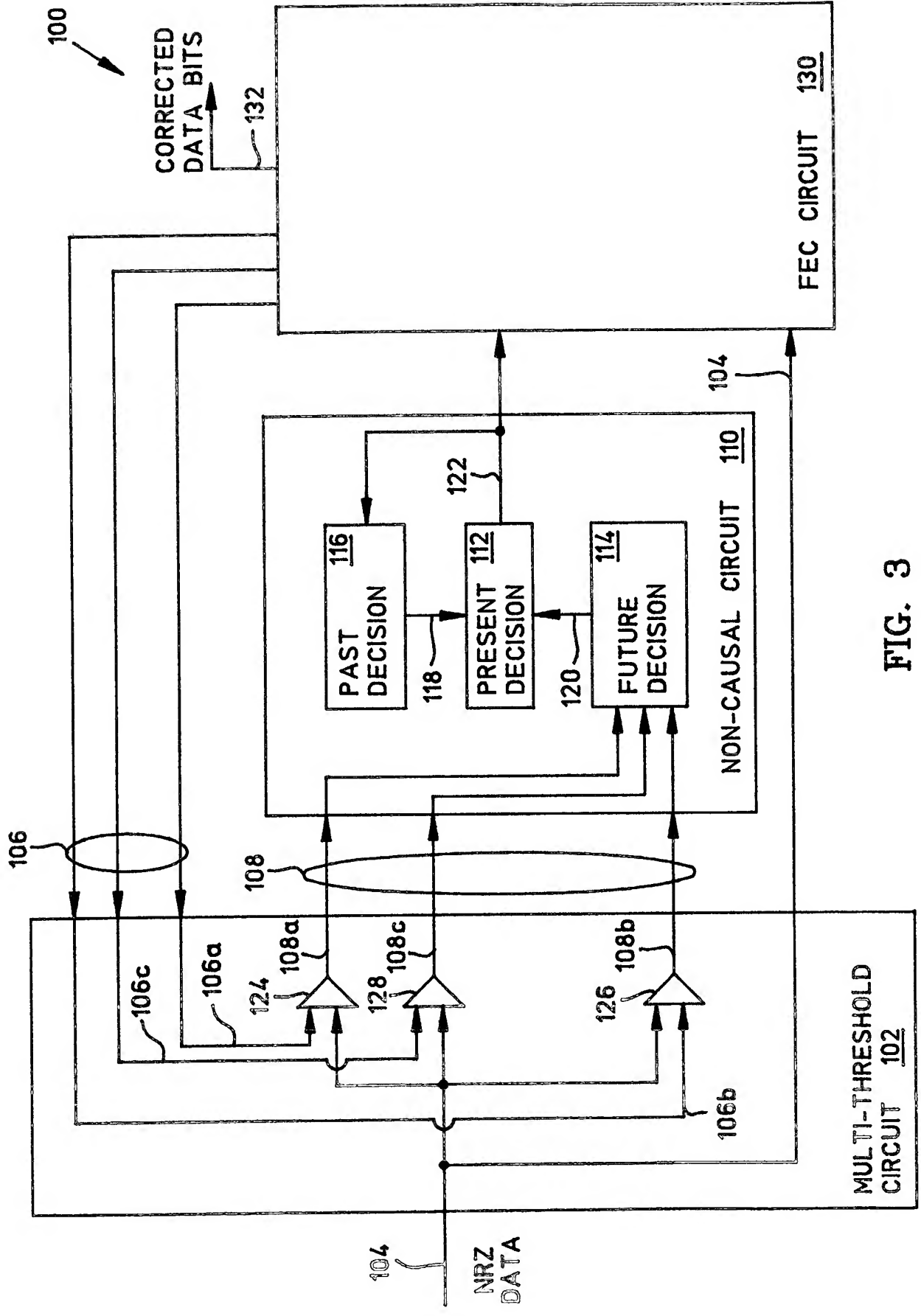


FIG. 3

NRZ DATA STREAM INPUTS

V1	definite "1"
	"0" if both 2nd and 3rd bit value decisions are "1"
	"1" if only one of the 2nd and 3rd bit value decisions is a "1"
	"1" if both 2nd and 3rd bit values are "0"
Vopt	"1" if both 2nd and 3rd bit value decisions are "0"
	"0" if only one of the 2nd and 3rd bit value decisions is a "0"
	"0" if both 2nd and 3rd bit values are "1"
V0	definite "0"

FIG. 4

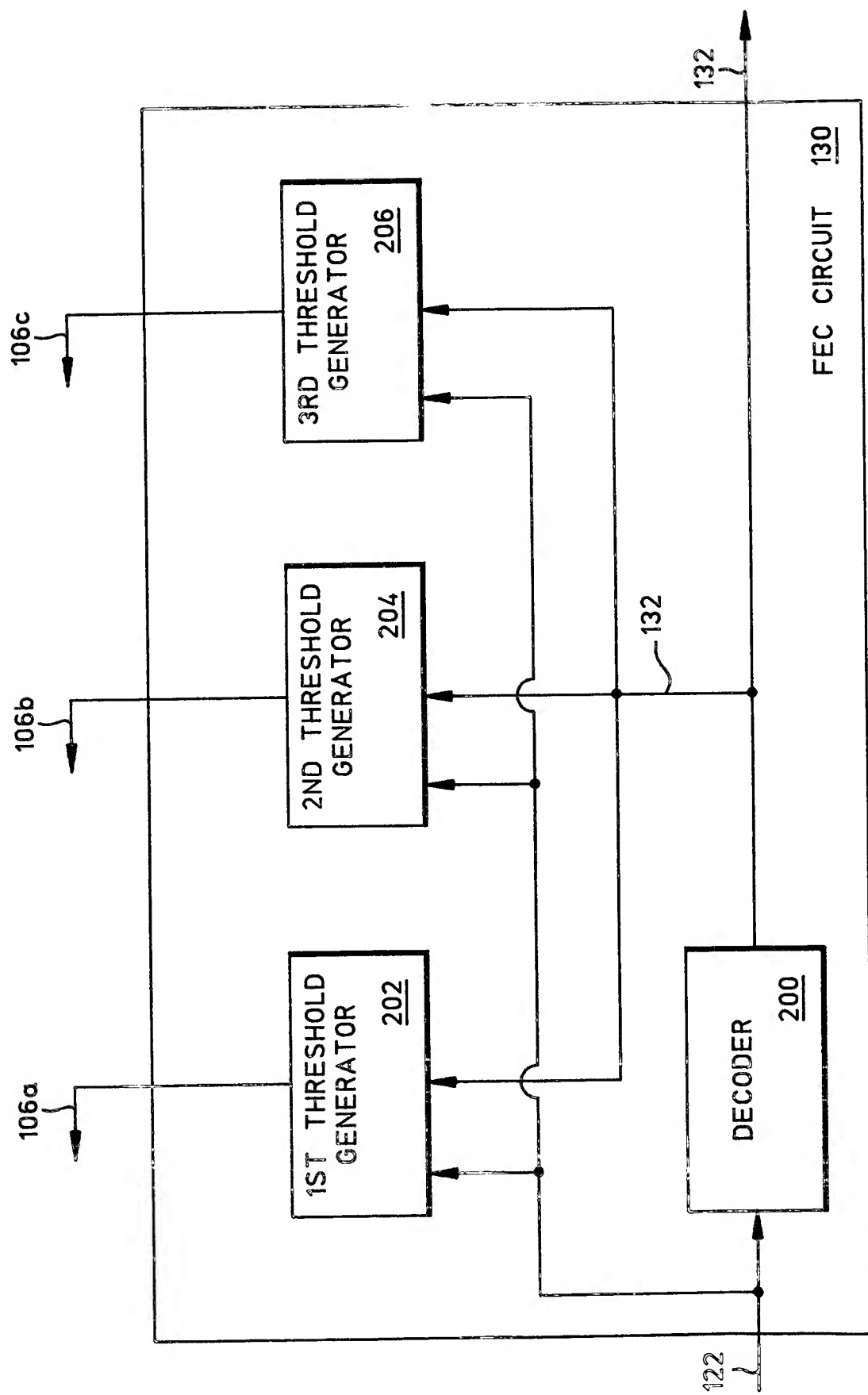


FIG. 5

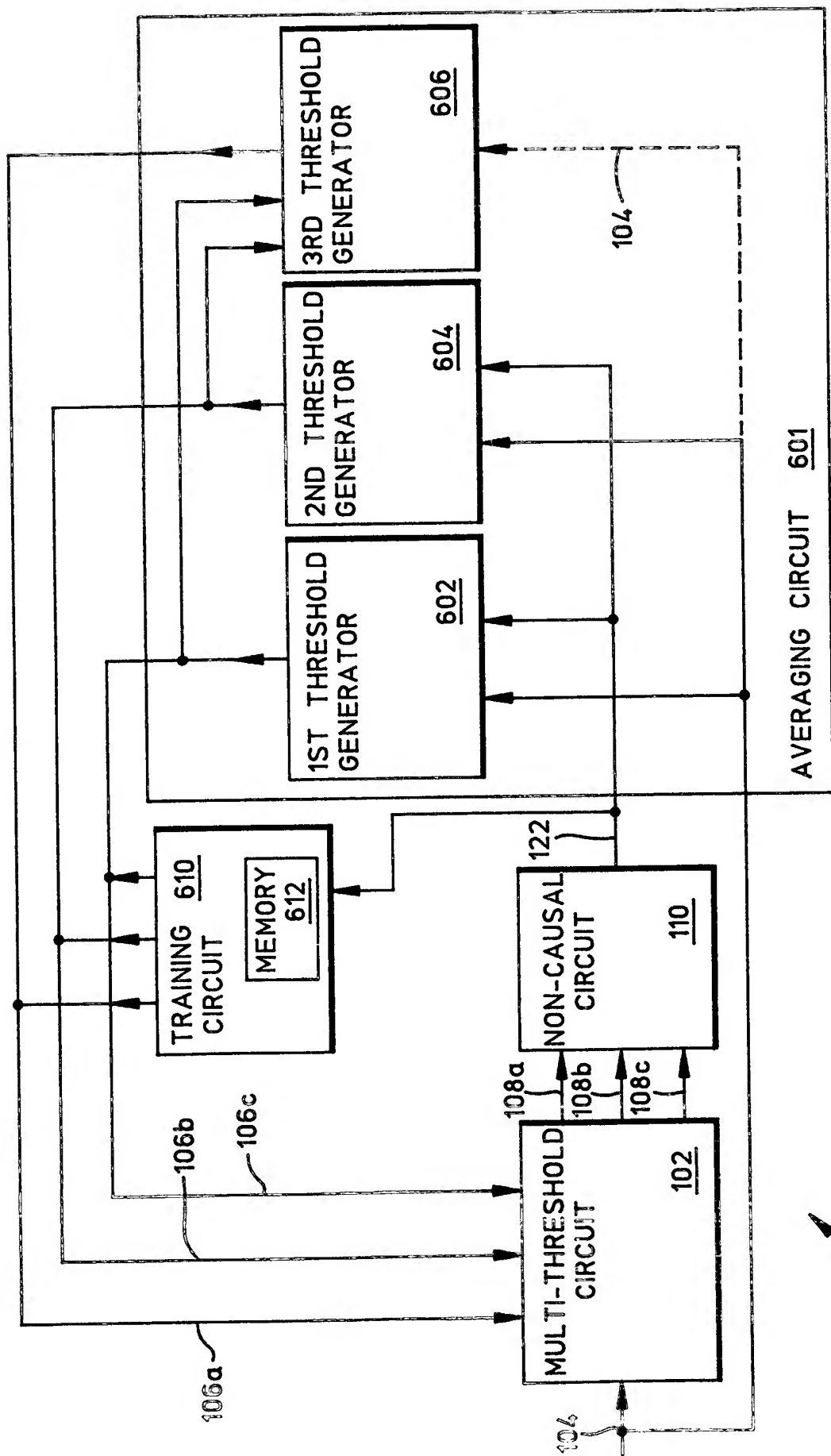


FIG. 6

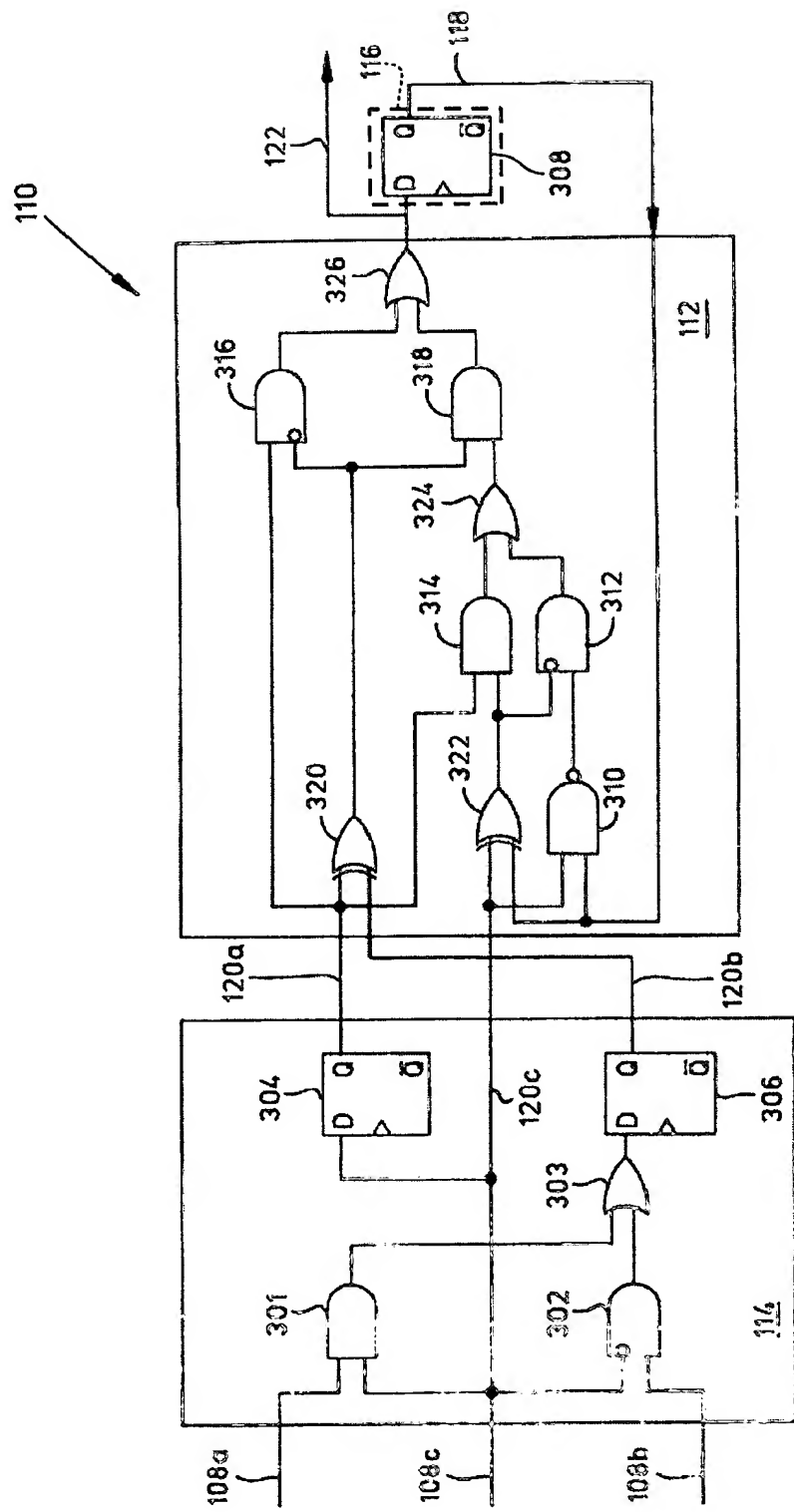


FIG. 7A

FIRST BIT ESTIMATE	Line 120a	120b	2ND BIT		3RD BIT		1ST BIT	
			Value		Value		Value	
	0	0	0	0	0	0	0	0
	0	0	0	0	1	1	0	0
	0	0	1	1	0	0	0	0
	0	0	1	1	1	1	0	0
	0	1	0	0	0	0	1	1
	0	1	0	0	1	1	0	0
	0	1	1	1	0	0	0	0
	0	1	1	1	1	1	0	0
	1	0	0	0	0	0	1	1
	1	0	0	0	1	1	1	1
	1	0	1	1	0	0	1	1
	1	0	1	1	1	1	0	0
	1	1	0	0	0	0	1	1
	1	1	0	0	1	1	1	1
	1	1	1	1	0	0	1	1
	1	1	1	1	1	1	1	1

FIG. 7B

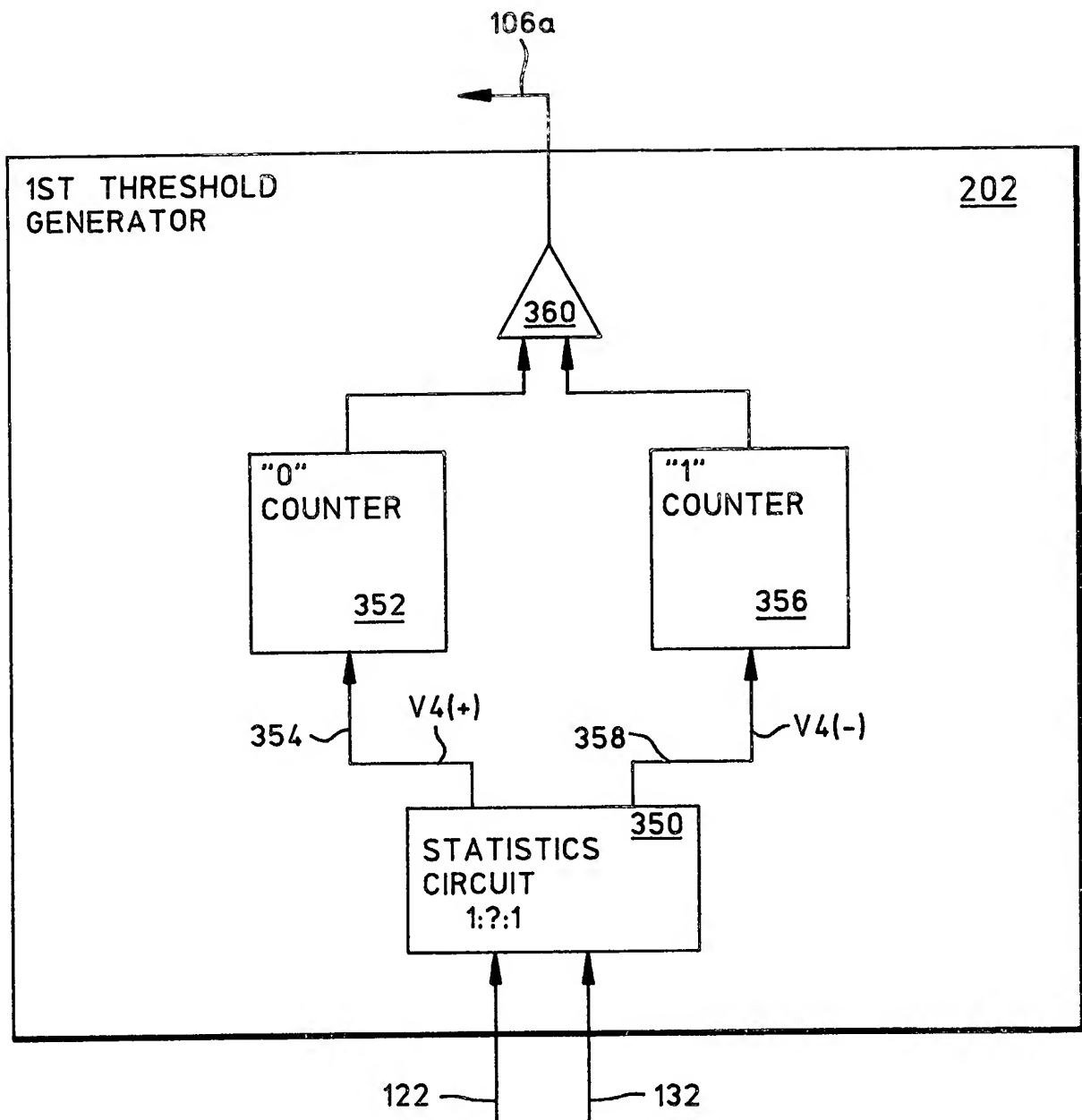


FIG. 8


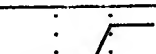
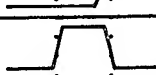
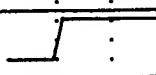



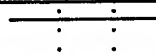
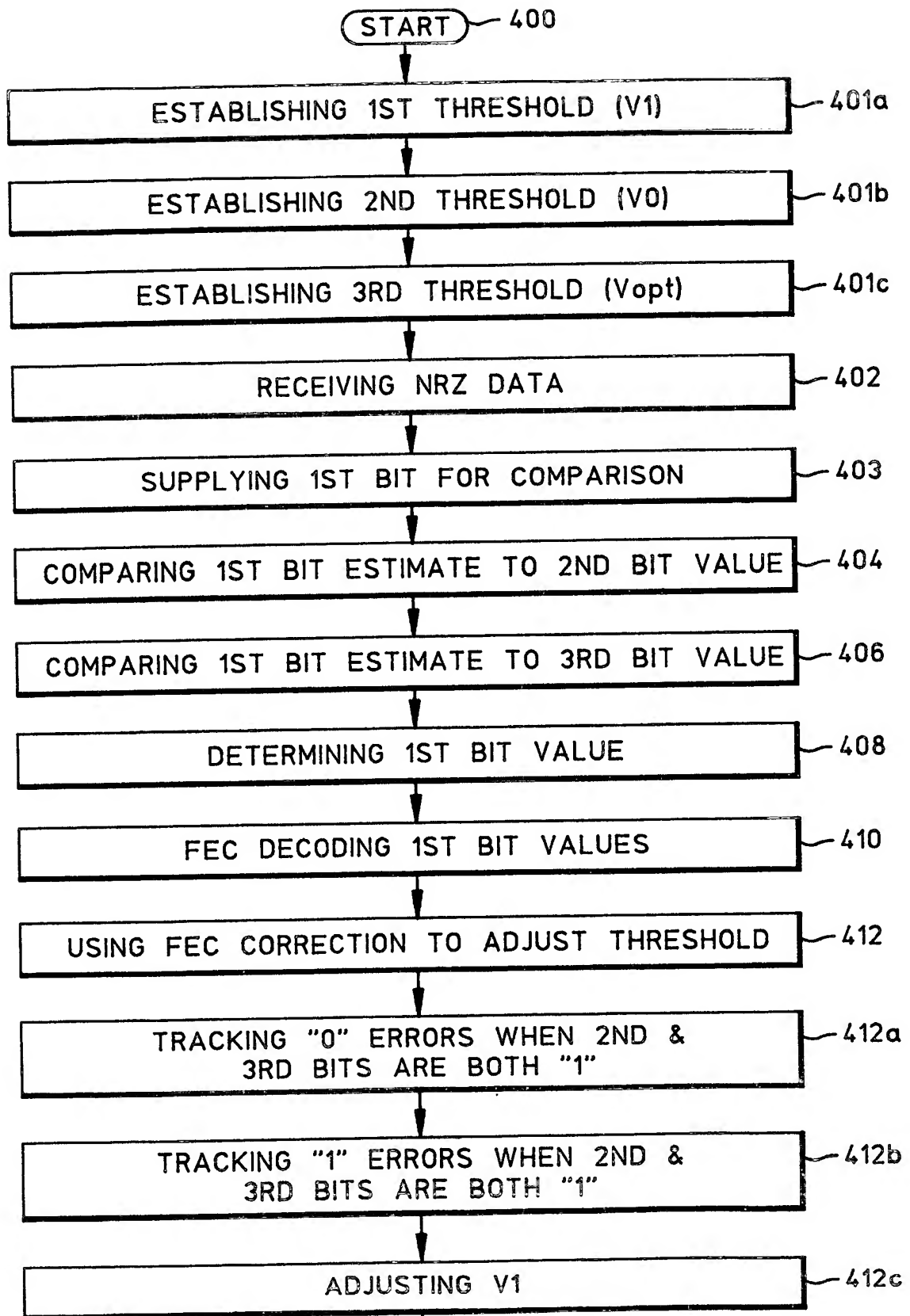
Only One Correction per 3 bit sequence Error in the center bit					
Corrected Sequence	Graphic	Affected Counter		Action on Feedback	
		0 cntr	1 cntr	-	+
0 0 0		Cond 1 0 inc		V1 Toggle	
0 0 1		Cond 2 0 inc		V2 Toggle	
0 1 0			Cond 1 1 inc		V1 Toggle
0 1 1			Cond 2 1 inc		V2 Toggle
1 0 0		Cond 3 0 inc		V3 Toggle	
1 0 1		Cond 4 0 inc		V4 Toggle	
1 1 0			Cond 3 1 inc		V3 Toggle
1 1 1			Cond 4 1 inc		V4 Toggle

FIG. 9



TO FIG. 10B

FIG. 10A

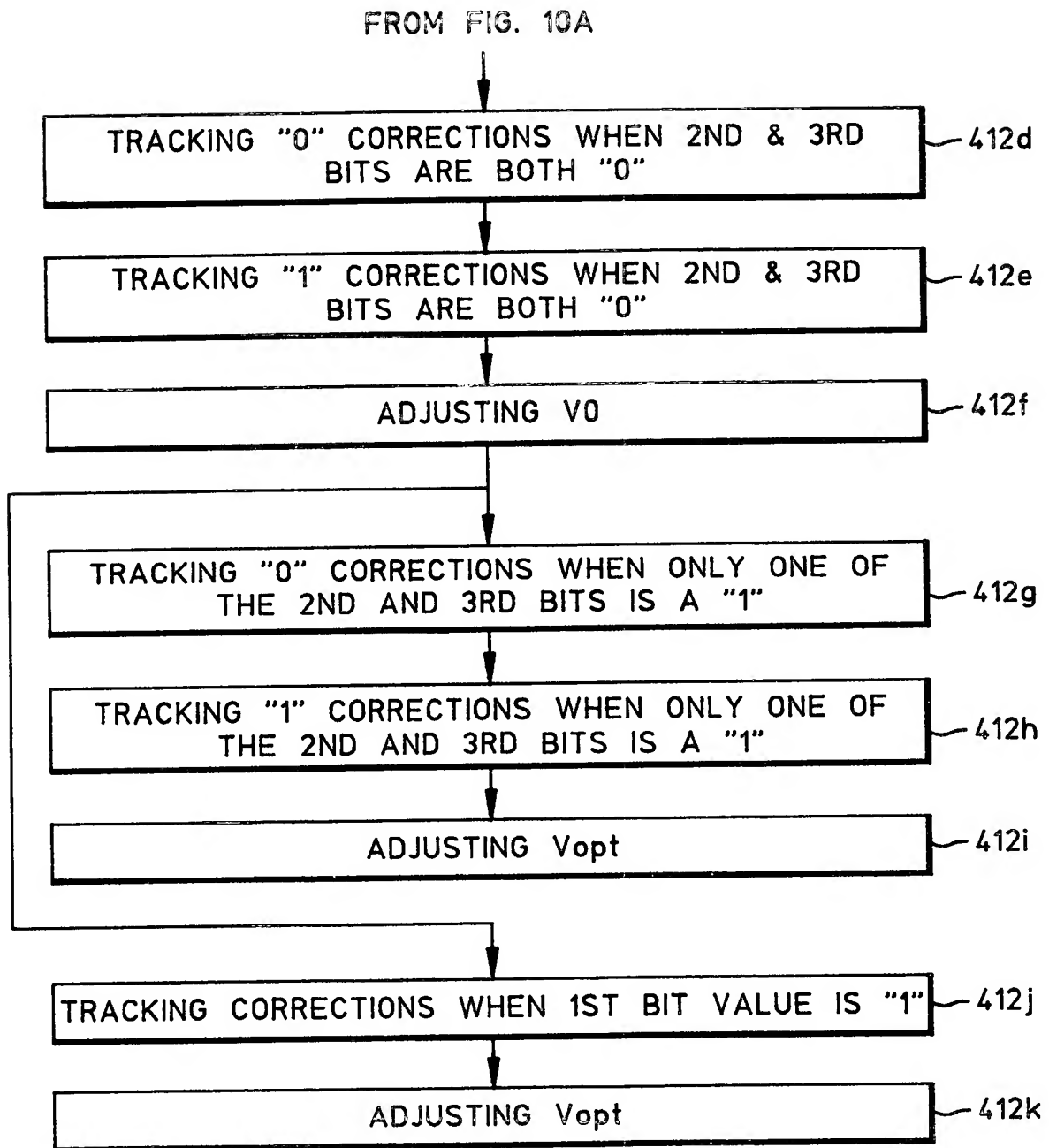


FIG. 10B

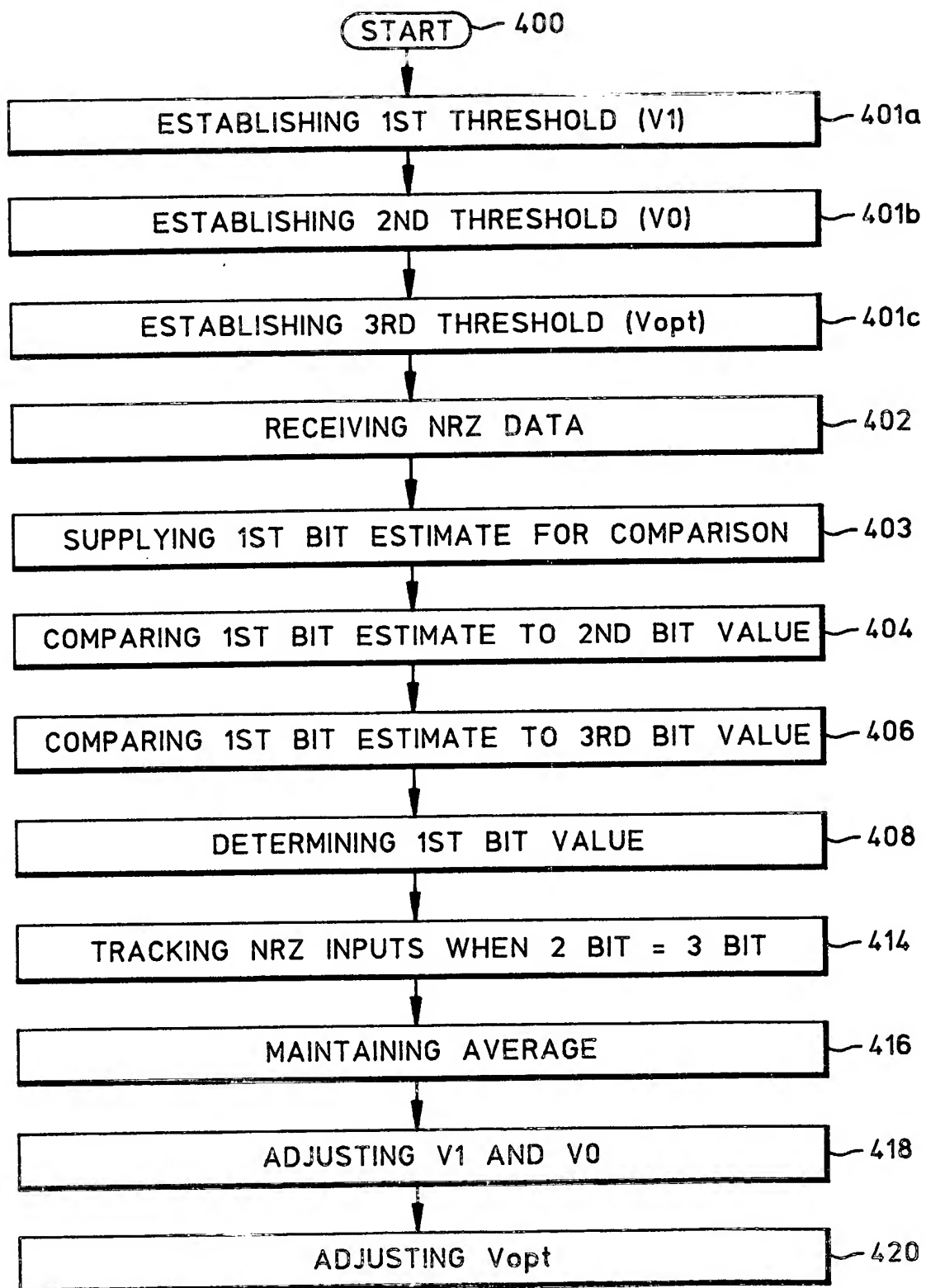


FIG. 11

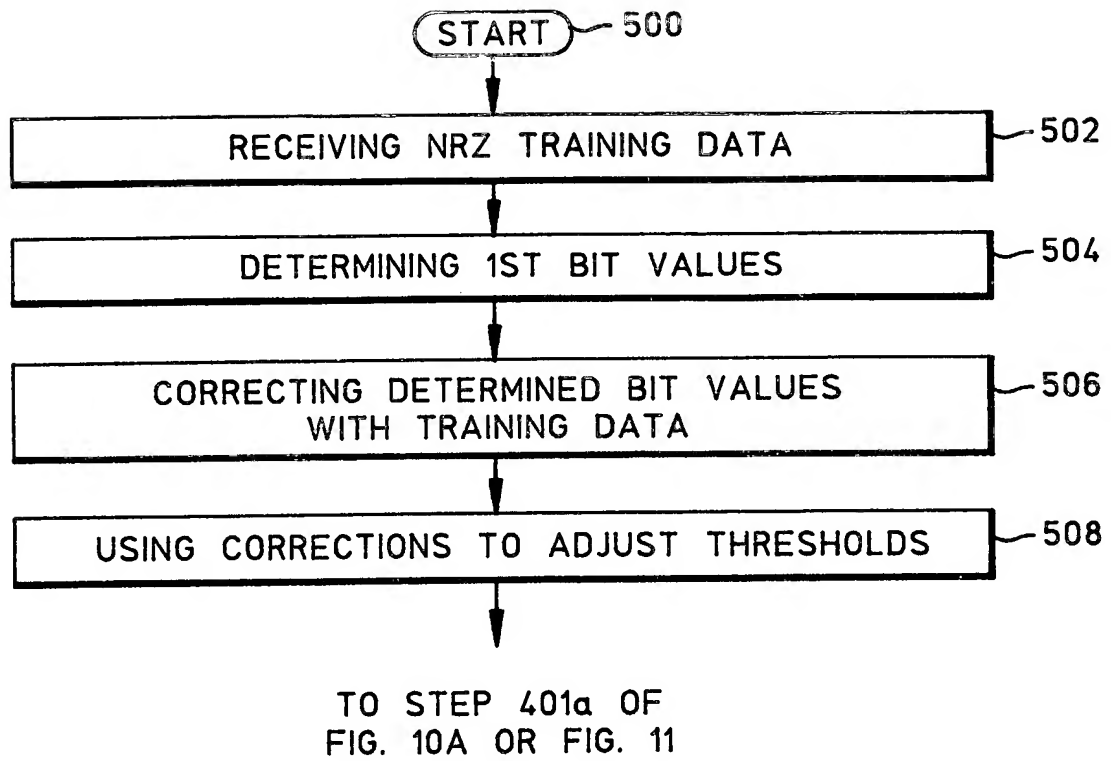


FIG. 12